I. CLAIMS LISTING

LISTING OF THE CLAIMS

1.-14. (Canceled)

15.   (Previously presented) An *in vitro* screening assay for determining a candidate agent's diacylglycerol-*O*-acyltransferase (DGAT) inhibitory activity, said assay comprising:

(a)   contacting a DGAT polypeptide with said candidate agent, wherein said DGAT polypeptide exhibits diacylglycerol-*O*-acyltransferase activity, and wherein said DGAT polypeptide comprises an amino acid sequence having at least 98% amino acid sequence identity to the amino acid sequence set forth in SEQ ID NO:6; and

(b)   detecting a change in DGAT enzymatic activity of said DGAT polypeptide compared to a control to determine said candidate agent's DGAT inhibitory activity, wherein said detecting comprises detecting incorporation of a detectably labeled fatty acyl CoA into a diacylglycerol acceptor.

16.-17. (Canceled)

18.   (Previously presented) The screening assay according to Claim 15, wherein said DGAT polypeptide comprises the amino acid sequence set forth in SEQ ID NO:6.

19.-20. (Canceled)

21.   (Previously presented) The screening assay according to Claim 15, wherein said contacting comprises introducing said candidate agent into a cell that includes said DGAT polypeptide.

22.-67. (Canceled)

68. (Previously presented) An *in vitro* screening assay for determining a candidate agent's diacylglycerol-*O*-acyltransferase (DGAT) inhibitory activity, said assay comprising:

(a) contacting a DGAT polypeptide with said candidate agent, wherein said DGAT polypeptide exhibits diacylglycerol-*O*-acyltransferase activity, and wherein said DGAT polypeptide comprises an amino acid sequence having at least 98% amino acid sequence identity to the amino acid sequence set forth in SEQ ID NO:6; and

(b) detecting a change in DGAT enzymatic activity of said DGAT polypeptide compared to a control to determine said candidate agent's DGAT inhibitory activity, wherein said detecting comprises detecting incorporation of fatty acyl CoA into a detectably labeled diacylglycerol acceptor.